irisys
Thermal Imaging
Red Hot Intelligence

IRI 2010

THERMAL IMAGER

The IRI 2010 is an innovative thermal imager product offering outstanding imaging and temperature measurement performance together with the traditional Irisys features of flexibility, ease of use and minimal cost of ownership.

Irisys has produced an imager which is ideal for maintenance engineers and can be used to quickly find faults and identify failing components to save money.

The IRI 2010 comes with a set of innovative features, making it a unique product at its price:

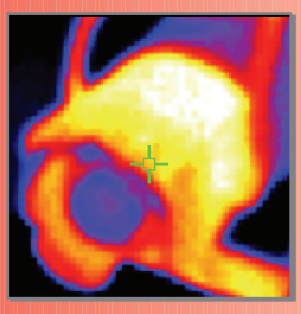
- Image Fusion lets you view the world in visual, thermal or a blend of both. Visual mode allows viewing of objects in a familiar manner, with superimposed temperature measurement. The level of visual and thermal image blending is adjustable from full visual to full thermal via a blending of the two views.
- Hot and Cold Tracking: The camera can identify the hottest or coldest point in the scene automatically. This assists the user in fast diagnostics.
- Audible and Visual alarms: The camera can issue an alarm when a point in the scene is outside a set temperature threshold value. The thresholds can be hot or cold, or both.
- Voice Annotation: The user can add voice messages to saved images as an aide memoir for later report writing.
- Software suite for off-line analysis and report generation.

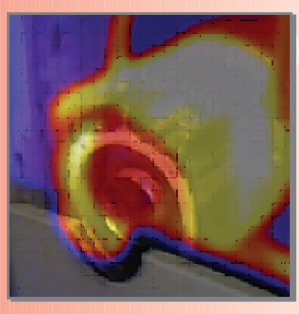
> *"Image fusion lets you view the world in thermal image, visible image, or a blend of both. A unique feature in an imager at this price."*

The IRI 2010 is a low cost camera combining the features normally found in high specification products with a robust and easy to use feel. Typical applications for the IRI 2010 include:

- Preventative Maintenance; electrical and mechanical.
- Domestic & Industrial energy audits.
- HVAC & Refrigeration inspection.
- Troubleshooting and fault finding.

The IRI 2010 is the thermal imaging product designed for the mass market.





Quality System
Quality Endorsed Company
QEC23518
InfraRed Integrated Systems Ltd

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TECHNICAL SPECIFICATION

PERFORMANCE

Field of view (FOV):	20° x 20°
Spectral Response:	8µm to 14µm
Sensitivity:	≤0.3°C @ 30°C
Detector:	47 x 47 pixel array
Frame rate:	8Hz
Focus Range:	0.5m to infinity

IMAGE STORAGE

Number: Up to 1000 images on micro SD card supplied

DISPLAY

3 1/2" colour LCD with LED Backlight. 8 colour palettes. Mixed thermal and visible images.

LASER POINTER

A built in Class 2 laser is supplied to highlight the centre of the thermal image. (Aligned at 2 metres)

Beam Divergence	<0.2mrad
Maximum Output	<1mW

MEASUREMENT

Temperature range:	-10°C to +350°C
Radiometry:	Two moveable temperature measurement cursors with temperature difference measurement.
Emissivity Correction:	User selectable 0.10 to 1.00 in steps of 0.01 with reflected ambient temperature compensation
Accuracy:	The greater of ±2°C or ±2% of reading in °C

IMAGER POWER SUPPLY

Battery:	Lithium-ion field rechargeable.
Operation time:	Up to 6 hours continuous operation
AC operation:	AC adaptor supplied

MECHANICAL

Housing:	Impact Resistant Plastic with over moulded soft plastic and detachable handle
Dimensions:	130mmx95mmx90mm (excluding handle)
Weight:	0.70kg
Mounting:	Handheld & tripod mounting 1/4" BSW

SETTINGS AND CONTROLS

- On/Off soft power control
- User selectable span & level control
- Auto adjust span and level
- 4 preset thermal / visual alignment distances
- Manual thermal / visual alignment
- Readout in °C or °F
- User selectable image integration
- User selectable emissivity setting
- User selectable reflected temperature
- Two moveable temperature measurement cursors
- Area analysis – 3 options
- X-Y profiles
- Isotherms
- Text annotation
- Voice annotation
- Image capture, time and date
- Visual/audio alarm high and low

OPTIONAL ACCESSORIES

- 12V car charger
- Light shade.

FEATURES

- Real-time image and temperature measurement display
- Visible/thermal/mixed image fusion (100%, 75%, 50%, 25%, 0%)
- Simple operation
- Multiple temperature measurement
- Image browser
- Battery Charge indicator
- Lightweight
- Laser Pointer
- Auto hot/cold seeker
- Languages
- Thermal lens focus meter.
- LED illuminator for operation in dark environments

IRI 2010 Includes

IR Camera, Handle, Battery, AC Adaptor, USB cable, Lanyard and lens cover tie, Quick start guide, Carrying Case, CD with user manual and software (Analysis and report writer)

Computer requirements (for PC software)

PC: IBM compatible PC with a minimum of: 300MHz processor, MS Windows XP, VISTA, 128MB RAM (see Irisys website for current list of operating systems supported). Minimum Graphics resolution 16 bit colour @ 1024 x 768 pixels, Minimum free hard disk space requirement 10MB

ENVIRONMENT

Temp. operating range: -5°C to +45°C
Humidity: 10% to 90% non condensing
Temp. storage range: -20°C to +60°C
CE Mark (Europe)
IP rating: IP54
Operating temp for stated accuracy: 23 ºC

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February 2009
IPU 40234